

AUTHORIZED PROTECTIVE EYEWEAR LIST (APEL) OCTOBER 2006

1. Lessons learned from recent conflicts have taught us that we can expect 10% of battlefield casualties to incur eye injuries. As body armor has become more universally available, Soldiers have benefited from increased survivability on the battlefield. "Eye Armor" must also be provided to Soldiers, and it is imperative that commanders ensure the wear of the protective eyewear whenever engaging in field tactical operations, training, or situations where there is risk of combat.

2. **Standard Type (Military) Classified Eyewear:** The eyewear listed below provides ballistic, ultraviolet (UV) and laser eye protection. However, **this eyewear is not approved for flight operations.** This eyewear was previously fielded to the Army. Replacement eyewear may be obtained by submitting funded requisition through normal supply channels to the Defense Supply Center Philadelphia (DSCP) (RIC S9T). Refer to FEDLOG for pricing information.

MILITARY OPTIONS

Spectacle System With Prescription Lens Carrier Capability

Authorized <u>SPECTACLES</u>	NSN
Ballistic Laser Protective Spectacles (BLPS)	
BLPS, Clear	8465-01-416-4636
BLPS, Gray (Sunglass)	8465-01-417-4004
BLPS, 2WL Laser Protective	8465-01-416-3207
BLPS, 3WL Laser Protective	8465-01-416-3210
Carrying Case	8465-01-417-9963
Retainer Strap	8465-01-416-4637
Prescription Lens Carrier (M-40 Insert)	6540-01-264-1348



BLPS can be worn by all Soldiers for field tactical operations, training or situations where there is a risk of ballistic or laser eye injuries. The prescription lens carrier (PLC) for this system is the M-40 protective mask insert (obtained at the Soldier's local Optometry Clinic). Soldiers should maintain a separate insert for their protective mask and BLPS system. It is imperative that Soldiers confirm a proper fit of their BLPS with the PLC in place before use and utilize the proper laser shield for their environment. Each pair will have its own retainer strap and hardened plastic case. BLPS are available in one size only and provide LASER PROTECTION as well as BALLISTIC PROTECTION.

Spectacle System Without Prescription Lens Carrier Capability

Authorized <u>SPECTACLES</u>	NSN
Special Protective Eyewear Cylindrical System (SPECS)	
SPECS Kit Regular	8465-01-416-4626
SPECS Kit Large	8465-01-416-4629
SPECS, 2WL Laser Protective, Regular	8465-01-416-4634
SPECS, 2 WL Laser Protective, Large	8465-01-416-4632
SPECS, 3 WL Laser Protective, Regular	8465-01-416-4635
SPECS, 3 WL Laser Protective, Large	8465-01-416-8516
SPECS, Clear – Ballistic Lens, Regular	8465-01-416-4628
SPECS, Clear – Ballistic Lens, Large	8465-01-416-4631
SPECS, Gray – Ballistic Lens, Regular	8465-01-416-4630
SPECS, Gray – Ballistic Lens, Large	8465-01-416-4633
Carrying Case	8465-01-416-4627
Retainer Strap	8465-01-416-8537



SPECS are only for Soldiers who do not require optical correction for duty. The SPECS Kit is a sized item, available in sizes regular and large. It is estimated that 70% of the users of the SPECS system will require regular and 30% will require large. The SPECS Kit is configured with lenses that provide BALLISTIC PROTECTION only (LASER PROTECTIVE lenses must be requisitioned separately). The SPECS Kit contains one clear lens, one pop-in gray (sunglass) lens, a retaining strap and a hardened case.

Goggle System That May Be Worn Over Spectacles

Authorized <u>Goggles</u>	NSN
Sun, Wind, and Dust Goggle (SWDG)	
SWDG Kit (Clear and Gray Lenses)	8465-01-328-8268
SWDG Type 3 Replacement Lens, Clear	8465-01-109-3997
SWDG Type 4 Replacement Lens, Gray	8465-01-109-3996
SWDG Type 5 Lens, Laser Goggle 2 WL	8465-01-439-3506
SWDG Type 6 Lens, Laser Goggle, 3 WL	8465-01-439-3511



The SWDG is for Soldiers who have duty in sandy, windy or dusty environments. Soldiers who require optical correction must wear the SWDG over their eyeglasses. The SWDG comes in a kit, which includes one Type 3 clear – ballistic lens (installed in goggle frame), one Type 4 gray – ballistic lens (sunglass), and one carrying case. The Type 5, 2 wavelength laser – ballistic lens (green in color) and Type 6, 3 wavelength laser – ballistic lens (brown in color) must be requisitioned separately. The SWDG is designated as a one size fits all.

3. Authorized Commercial Eyewear Alternatives: To better meet the needs of units with diverse mission requirements, Army units are authorized to requisition and use the commercial eyewear listed below as alternatives to the standard type classified eyewear. **This eyewear will provide ballistic and UV protection, but does not provide laser protection and is not authorized for Army missions and training scenarios that require laser eye protection. Additionally, this eyewear is not approved for flight operations.** This eyewear may be obtained by submitting funded requisitions through the normal supply channels to the DSCP Directorate of General and Industrial RIC S9I. Refer to FEDLOG for pricing information.

COMMERCIAL OFF THE SHELF (COTS) OPTIONS

Spectacle Systems With Prescription Lens Carrier Capability

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Body Specs PISTOL Kit	1 each	PISTOLS-PKG-BLACK	4240-01-526-9637
Body Specs PISTOL Clear Replacement Lens	1 each	P-1C	4240-01-526-9642
Body Specs PISTOL Body Specs PISTOL Neutral Slate Replacement Lens	1 each	P-1G	4240-01-526-9645
Body Specs PISTOL Replacement Frame (includes temples and strap)	1 each	P-FH	4240-01-526-9653
Body Specs PISTOL Replacement Elastic Strap	1 each	P-H	4240-01-526-9656
Body Specs PISTOL Replacement Nose Piece	1 each	PN	4240-01-526-9714
Body Specs PISTOL Replacement Case	1 each	P-P	4240-01-526-9663
Body Specs PISTOL RX Carrier	1 each	P-RXC	6540-01-531-3810



The Body Specs PISTOL is a lightweight eye protective system with interchangeable lenses for effective eye protection. The PISTOL has an optical insert that fits behind the primary ballistic shield; the PISTOL can be worn by both prescription and non-prescription wearers. The PISTOL meets ANSI Z87.1-2003 optical and safety tests, provides ballistic-fragment protection, and weighs 1.1 ounces. The lens material blocks 100% of all UVA, UVB, and UVC light.

Spectacle Systems With Prescription Lens Carrier Capability (continued)

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Eye Safety Systems (ESS) Interchangeable Component Eyeshield (ICE) 2 Kit	1 each	ESSICE-2	4240-01-525-5085
ESS ICE2 Clear Replacement Lens	Package of 50	ESSICEL1-50	4240-01-525-4819
ESS ICE2 Smoke Gray Replacement Lens	Package of 50	ESSICEL2-50	4240-01-525-5098
ESS ICE2 Replacement Frame	1 each	ESSICEKIT	4240-01-525-5095
ESS ICE2 Replacement Carrying Pouch	1 each	1ESSICECS	4240-01-518-9838
ESS ICE2 Replacement Fog Repellent Cloth	Package of 24	ESSFOG24	4240-01-525-5107
ESS ICE2 Replacement Snap-on Neck Leash	Package of 24	ESSLSH-24	4240-01-525-4777
ESS P-2B Prescription Insert (fits both the ICE-2 spectacle and the ESS Profile NVG goggle)	1 each	EPPRSC-PB	6540-01-525-4784
 <p>ESS ICE 2 is a lightweight eye protective system with interchangeable lenses for effective eye protection. The ICE 2 has an optical insert that is compatible with both the ESS ICE 2 and the ESS Profile Goggle. The ESS ICE 2 Spectacle meets ANSI Z87.1-2003 optical and safety tests, provides ballistic-fragment protection, and weighs 1.2 ounces. The lens material blocks 100% of all UVA, UVB, and UVC light.</p>			

Spectacle Systems With Prescription Lens Carrier Capability (continued)

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Revision Sawfly USA Military Kit, Size Regular Kit	1 each	4-0076-9800	4240-01-527-4051
Revision Sawfly USA Military Kit, Size Large Kit	1 each	4-0076-9700	4240-01-527-4018
Clear Replacement Shield with Nosepiece Size Regular	Package of 10	4-0130-9100	4240-01-527-4052
Clear Replacement Shield with Nosepiece Size Large	Package of 10	4-0131-9100	4240-01-527-4061
Solar Replacement Shield with Nosepiece Size Regular	Package of 10	4-0130-9200	4240-01-527-4053
Solar Replacement Shield with Nosepiece Size Large	Package of 10	4-0131-9200	4240-01-527-4063
Retention Head Strap Replacement	Package of 10	4-0132-9100	4240-01-527-4067
Prescription Carrier Insert	Package of 10	4-0133-9100	6540-01-527-4056
Anti-fog, Anti-static Lens Cleaning Spray – 1 fluid Ounce Bottle	Package of 10	4-0134-0100	4240-01-527-4068
	<p>The Revision Sawfly is a lightweight eye protective system with interchangeable lenses for effective eye protection. The Sawfly has an optical insert that fits behind the primary ballistic shield; the Sawfly can be worn by both prescription and non-prescription wearers. The Sawfly Spectacle meets ANSI Z87.1-2003 optical and safety tests, provides ballistic-fragment protection, and weighs 1.2 ounces. The lens material blocks 100% of all UVA, UVB, and UVC light.</p>		

Spectacle Systems With Prescription Lens Carrier Capability (continued)

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Uvex XC Spectacle Kit	1 each	S99-S3399-MIL	4240-01-516-5361
Uvex XC Spectacle Clear Assembly	1 each	S99-S3300X-MIL	4240-01-516-3460
Uvex XC Spectacle Gray Assembly	1 each	S99-SS3301X-MIL	4240-01-516-3452
Uvex XC Spectacle Clear Replacement Lens, Antifog Coating	Package of 10	S6950X	4240-01-516-3469
Uvex XC Spectacle Gray Replacement Lens, Antifog Coating	Package of 10	S6951X	4240-01-516-3473
Uvex XC Spectacle Replacement Carrying Case (Black)	1 each	S99-S491-MIL	4240-01-516-3444
Uvex XC Spectacle Prescription Lens Carrier	1 each	S99-S3350-MIL	6540-01-516-5342



The UVEX XC protective eyewear consists of a lightweight rigid thermoplastic frame. The frame features ratchet lens adjustment to complete the fitting system and provides extended wear comfort. The frame and lens assembly weighs 1.3 ounces. The UVEX XC uses an interchangeable polycarbonate lens that protects the entire eye socket area with unobstructed vision. Additionally, a small ventilation space has been engineered between the frame and the lens that vents the eye socket area to help reduce moisture. All lenses have been treated with anti-fog coating to further reduce the level of moisture and control fogging. The lens provides ballistic-fragment protection, and meets all ANSI Z87.1-2003 safety requirements. The lens material blocks 100% of all UVA, UVB, and UVC light.

Spectacle Systems Without Prescription Lens Carrier Capability

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Oakley SI Ballistic M Frame Kit (Faceshield, Industrial)	1 each	11-105	4240-01-525-3095
Oakley SI Ballistic M Frame Strike Clear Replacement Lens	1 each	11-112	4240-01-525-7555
Oakley SI Ballistic M Frame Strike Gray Replacement Lens	1 each	11-113	4240-01-525-7554
Oakley SI Ballistic M Frame Replacement Storage Case	1 each	11-114	4240-01-525-7561
Oakley SI Ballistic M Frame Micro Bags	Bag of 5	11-115	4240-01-525-3109



The modified Oakley M Frame is a commercial-off-the-shelf protective eyewear system. The Oakley SI M Frame military design meets ANSI Z87.1-2003 optical and safety tests, meets military ballistic-fragment requirements, and weighs just over one ounce. The lens material blocks 100% of all UVA, UVB, and UVC light. This eyewear is for Soldiers who do not require prescription lenses.

Spectacle Systems Without Prescription Lens Carrier Capability (continued)

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Wiley X PT-1 Spectacles Kit	1 each	PT-1SC	4240-01-510-7853
Wiley X PT-1 Clear Replacement Lenses	50 each	PT-1CD	4240-01-528-5900
Wiley X PT-1 Smoke Replacement Lenses	50 each	PT-1SD	4240-01-528-5901
Wiley X PT Replacement Hard Case	1 each	PT-1BA-963L	4240-01-528-5902



The Wiley-X PT-1 protective eyewear consists of a lightweight rigid frame. The Wiley-X PT-1 uses an interchangeable polycarbonate lens, which protects the entire eye socket area. All lenses have been treated with anti-fog coating to further reduce the level of moisture and control fogging. The lens provides ballistic-fragment protection and meets all ANSI Z87.1-2003 safety requirements. The lens material blocks 100% of all UVA, UVB, and UVC light.

Authorized <u>SPECTACLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Wiley-X SG-1 Spectacle Kit	1 each	SG-1	4240-01-504-0994
Clear-Ballistic Replacement Lens	1 each	SG-1C	4240-01-504-5326
Green Smoke-Ballistic (sunglass) Replacement Lens	1 each	SG-1G	4240-01-504-5312
Elastic Strap Replacement	1 each	SG-1E	4240-01-504-5754
Replacement Frame (includes temples and strap)	1 each	SG-1F	4240-01-504-6524
Replacement Temples	1 each	SG-1T	4240-01-504-6474



The Wiley-X SG-1 spectacles are commercially available protective eyewear that provides ballistic and UVA/UVB protection. Users who do not require prescription lenses may wear the Wiley-X SG-1. The Wiley-X SG-1 is a dual lens eyewear that uses a foam seal around each eye socket to limit infiltration of wind and dust. The system provides two functions in one: converting from a spectacle with temple arms to a low profile spectacle with a strap. The temples disengage with a push of a button and can be replaced with the snap loaded elastic headband. The SG-1 spectacle weighs 1.3 ounces. The lens provides ballistic fragment protection (clear and sunglass) and meets all ANSI Z87.1-2003 safety requirements.

Goggle Systems That May Be Worn Over Spectacles

Authorized <u>GOGGLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
ESS Land Ops Goggles Kit (with anti-reflective sleeve), Foliage Green	1 each	ESS-01FG-MLSC	4240-01-540-5576
ESS Land Ops Goggles Kit (with anti-reflective sleeve), Desert Tan	1 each	ESS01DT-MLSC	4240-01-540-5580
ESS Land Ops Goggles Clear-Ballistic Replacement Lens	Package of 50	EL1-50	4210-01-492-5722
ESS Land Ops Goggles Smoke Gray-Ballistic Replacement Lens	Package of 50	EL2-50	4210-01-492-5725
 <p>The ESS Land Operations Goggles can be worn by both prescription lens wearers and individuals who do not require prescription lenses. The ESS Land Operations Goggles have an injection molded rubber frame with polyurethane foam backing with a foam skin that contacts the face. The rubber frame holds the lens while the foam interface provides a seal between the face and goggle frame. Foam covered vent holes allow some ventilation while keeping dust out. The clear and sunglass lenses are a single-piece, simple-curve, injection-molded, high-impact polycarbonate design with anti-scratch and anti-fog coatings. The ESS Land Operations Goggles provide ballistic-fragment and UVA/UVB protection. The lens has a nominal thickness of 2.4 mm and meets US military MIL V-43511C ballistic impact requirements. The anti-reflective sleeve reduces glint when the goggle is not in use. The ESS Land Operations Goggle weighs 4.1 ounces.</p>			

Authorized <u>GOGGLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
ESS Vehicle Ops Goggles (Black Frame) Kit (with anti-reflective sleeve)	1 each	ESS01BK-MCSC	4240-01-525-5101
ESS Vehicle Ops Goggles Clear-Ballistic Replacement Lens (same as for ESS Land Ops Goggles)	Package of 50	EL1-50	4210-01-492-5722
ESS Vehicle Ops Goggles Smoke Gray-Ballistic Replacement Lens (same as for ESS Land Ops Goggles)	Package of 50	EL2-50	4210-01-492-5725
 <p>The ESS Vehicle Ops Goggle is designed for Soldiers exposed to harsh environments while operating vehicles, and both prescription lens wearers and individuals who do not require prescription lenses can wear the ESS Vehicle Operations Goggles. The high-density, restricted perimeter filtration provides a barrier against airborne debris while traveling at high speeds. The ESS Vehicle Ops goggle has a fully ventilated frame with buffered airflow for fog resistance and high filtration of airborne particles. The face padding is skinned to provide durability and easy clean-up. The ESS Vehicle Ops Goggles meets ANSI Z87.1-2003 optical and safety tests, provides ballistic-fragment protection, and weighs approximately 5 ounces.</p>			

Goggle System With Prescription Lens Carrier Capability

Authorized <u>GOGGLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
ESS Profile NVG Goggles (Black Frame) Kit	1 each	EP01BK1-TSB	4240-01-504-6222
ESS Profile NVG Goggles (Foliage Green Frame) Kit	1 each	EP01FG1-MSB	4240-01-540-5585
ESS Profile NVG Goggles (Desert Tan Frame) Kit	1 each	EP01DT1-MSB	4240-01-504-5727
ESS Profile NVG Goggles Clear-Ballistic Replacement Lens	Package of 50	PR1C-50	4240-01-504-5641
ESS Profile NVG Goggles Smoke Gray-Ballistic Replacement Lens	Package of 50	PR1Y-50	4240-01-504-6143
ESS P-2B Prescription Insert (fits both the Profile NVG Goggle and ESS ICE-2 Spectacle)	1 each	EPPRSC-PB	6540-01-525-4784
 The ESS Profile NVG Goggle provides ballistic and UVA/UVB protection. It has an injection molded rubber frame with rubber goggle seal that contacts the face. Foam covered vent holes allow ventilation while keeping dust out. The clear and sunglass lenses are a single-piece, simple-curve, injection-molded, high-impact polycarbonate design with anti-scratch and anti-fog coatings. The lens has a nominal thickness of 2.8 mm, provides ballistic-fragment protection and meets ANSI Z87.1 requirements. Clear and sunglass lenses offer 100% UVA/UVB protection. The anti-reflective sleeve reduces glint when the goggle is not in use. The ESS Profile NVG Goggle's weight of 4.1 ounces is comparable with the Sun, Wind and Dust Goggle.			

Goggle System Authorized For Non-Prescription Wearers Only

Authorized <u>GOGGLES</u>	Unit of Issue	Manufacturer's Part Number	NSN
Arena FlakJak Goggle Kit	1 each	SSK-FLK-LF-GL-GP/DT	4240-01-527-4076
Arena Goggle Clear-Ballistic Replacement Lenses	Package of 50	AR4-GL-001-NC/CA/B5	4240-01-527-4079
Arena Goggle Smoke Gray-Ballistic Replacement Lens	Package of 50	AR4-GL-001-NC/SA/B5	4240-01-527-4082
Arena Goggle Replacement Pouch, Goggle/Universal/With One Lens Cloth-Carrier/Khaki	1 each	SSC-G-BAG/K	4240-01-527-4078
Arena Goggle Replacement Strap, FlakJak/Desert Tan	1 each	AR4-SA-001-NC/DT	4240-01-527-4085
 The Flakjak Goggle provides ballistic and UVA/UVB protection. It has an injection molded rubber frame with rubber goggle seal and foam padding that contacts the face. The rubber frame holds the lens. The clear and sunglass lenses are a single-piece, simple-curve, injection-molded, high-impact polycarbonate design with anti-scratch and anti-fog coatings. The lens provides ballistic-fragment protection, and meets all ANSI Z87.1 requirements. Clear and sunglass lenses offer 100% UVA/UVB protection. The anti-reflective sleeve reduces glint when the goggle is not in use.			

4. **For Soldiers who require prescription spectacles**, the Body Specs Pistol with Prescription Lens Carrier (PLC), ESS ICE 2 with PLC, Revision Sawfly with PLC and UVEX XC with PLC are authorized for use as alternatives to the BLPS system. For Soldiers who require prescription lenses for goggle applications, the ESS Land Operations, ESS Vehicle Operations and ESS Low Profile NVG goggles are authorized for use as alternatives to the SWDG system. Use of any prescription lens or lens carrier that is not authorized may result in serious injury.

5. Only clear, gray sunglass and the SPECS/BLPS/SWDG laser protective tints are authorized. Other lens tints, including yellow, orange, rose and others known as “blue blockers” are not authorized by this office because they adversely impact and degrade color recognition and overall mission performance. We recommend that Soldiers refrain from using and should not accept manufacturers’ claims alleging performance enhancements due to their product, unless/until the claims can be independently verified by this office and the U.S. Army Medical Command.

6. Points of contact for this information are:

- a. Optometry Consultant: COL Neil G. Glenesk, 5109 Leesburg Pike, Ste. 684, Falls Church, VA 22041-3258, (703) 681-3152, neil.glenesk@us.army.mil
- b. Product Office Assistant Manager for Eyewear: Product Manager – Clothing and Individual Equipment, ATTN: SFAE-SDR-CIE, 10170 Beach Road, Building 325T, Fort Belvoir, VA 22060-5800, (703) 704-3826, sarah.morganclyborne@us.army.mil
- c. Logistics Manager: Project Manager Soldier Equipment – Philadelphia, 700 Robbins Ave., P.O. Box 57997, Philadelphia, PA 19111-5092, (215) 737-2510, DSN 444-2510, myron.pross@us.army.mil

7. Standard ordering procedures (funded requisitions) can be used for the standard type (military) classified eyewear and authorized commercial eyewear alternatives.

8. Contact the following POCs to order authorized commercial eyewear alternatives using the DLA Prime Vendor Program:

- a. Procurement center / unit can MIPR funds to DSCP Prime Vendor Program to obtain items by part number and NSN. **We encourage units making large quantity purchases to request better pricing than the prices listed in FEDLOG.** Contact information for the Prime Vendor Program is Mr. Ralph Lund, Contracting Officer, Commander, Defense Supply Center Philadelphia (SCO500), 700 Robbins Ave., Philadelphia, PA 19111-5092, (215) 737-4154, DSN 444-4154, FAX (215) 737-4036, ralph.lund@dla.mil

b. All NSNs can be ordered via E-Mail. Customers can enter the E-Mail link at <https://emall6.prod.dodonline.net/main/> or call the central call center at 1-877-352-2255, option 3, then option 3 again. The customer can speak to a person by using option 3 and then option 1 (instead of the second 3). Both options are available to take orders 24 hours a day. Registration is required for the website which has on-line customer support available on the lower left-hand side of the homepage.

c. Technical Buying point of contact is Mr. Steve D'Agostino, Defense Supply Center Philadelphia, (215) 737-2745, steve.dagostino@dla.mil